10/500966 DT15 d PCT/PTO 08 JUL 2004

THE FOLLOWING IS THE ENGLISH TRANSLATION OF THE ANNEXES TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT: AMENDED SHEETS FOR 1ST ARTICLE 34 (Pages 43,44,45,46,47,48,49,49/1, and 49/2)



What is claimed is:

- 1. A transfer mechanism for transferring substrates to be processed relative to a processing apparatus in a semiconductor processing system, the transfer mechanism comprising:
 - a transfer base; and
- a first and a second support arm slidably installed side by side on the transfer base,
- 10 wherein the first and the second support arm respectively have a first and a second support surface for holding the substrates to be processed; the first and the second support surface are positioned on a substantially same plane; and the first and the second support arm are operated such that the first and the second support surface are projected from the transfer base toward a substantially equivalent side.
- The transfer mechanism of claim 1, further comprising
 a support for supporting the transfer base, which is revolvable relative to the support.
- 3. The transfer mechanism of claim 2, wherein the support is a stretchable and bendable arm that is stretchable and bendable.

- 4. The transfer mechanism of claim 2, wherein a first and a second driving motor for respectively sliding the first and the second support arm and a third driving motor for revolving the transfer base are disposed at an outside of the transfer base, and an axis for revolving the transfer base relative to the support has a three-axis coaxial structure for transferring driving forces of the first to third driving motors.
- 5. A transfer mechanism for transferring substrates to be processed relative to a processing apparatus in a semiconductor processing system, the transfer mechanism comprising:
 - a linearly movable moving table;

25

- a transfer base connected to the moving table via a coupling axis, the transfer base being revolvable relative to the moving table with the coupling axis being a center of revolution; and
- a first and a second support arm slidably installed side by side on the transfer base,

wherein the first and the second support arm respectively have a first and a second support surface for holding the substrates to be processed; the first and the second support surface are positioned on a substantially same plane; and the first and the second support arm are operated such that the first and the second support surface

- are projected from the transfer base toward a substantially equivalent side.
- 6. The transfer mechanism of claim 5, wherein the moving table and the transfer base are accommodated in a first and a second chamber divided by a sectional plate, and a guide slit allowing the coupling axis to move is formed in the sectional plate.

- 7. The transfer mechanism of claim 6, wherein the first and the second chamber are surrounded by a case; a first and a second driving motor for respectively sliding the first and the second support arm and a third driving motor for revolving the transfer base are disposed at an outside of the case; and the coupling axis has a three-axis coaxial structure for transferring driving forces of the first to third driving motors.
- 8. The transfer mechanism of claim 7, further comprising first to third spline axes, respectively connected to the first to third driving motors, for transferring the driving forces of the first to third driving motors to the three-axis coaxial structure, wherein the first to third spline axes are provided in parallel with each other in the first chamber and the moving table is linearly movable along the first to third spline axes.

- 9. The transfer mechanism of claim 1 or 5, wherein the first and the second support arm slide along substantially circular arcs.
- 10. The transfer mechanism of claim 1 or 5, wherein the first and the second support arm slide along substantially circular arcs, and the first and the second support surface occupy a same position when being in a state projected from

10

15

20

the transfer base.

- 11. The transfer mechanism of claim 1 or 5, wherein the first and the second support arm slide along directions converging toward each other when projected from the transfer base.
- 12. The transfer mechanism of claim 1 or 5, wherein the first and the second support arm slide along directions converging toward each other when projected from the transfer base, and the first and the second support surface occupy a same position when being in a state projected from the transfer base.
- 13. The transfer mechanism of claim 1 or 5, wherein the first and the second support arm slide along directions diverging from each other when projected from the transfer

base.

- 14. The transfer mechanism of claim 1 or 5, wherein the first and the second support arm are disposed in parallel with each other.
- 15. The transfer mechanism of claim 1 or 5, wherein driving motors for respectively sliding the first and the second support arm are supported on the transfer base in an airtight state.
 - 16. The transfer mechanism of claim 2 or 5, wherein a driving motor for revolving the transfer base is supported on the transfer base in an airtight state.

15

10

5

- 17. A semiconductor processing system comprising:
 - a common transfer chamber;
- a plurality of processing apparatuses connected in parallel to the common transfer chamber; and
- a transfer mechanism, disposed in the common transfer chamber, for transferring substrates to be processed relative to the processing apparatuses,

wherein the transfer mechanism includes:

- a rovolvable transfer base; and
- a first and a second support arm slidably installed side by side on the transfer base,

wherein the first and the second support arm respectively have a first and a second support surface for holding 'the substrates to be processed; the first and the second support surface are positioned on a substantially same plane; and the first and the second support arm are operated such that the first and the second support surface are projected from the transfer base toward a substantially equivalent side.

- 10 18. The semiconductor processing system of claim 17, further comprising an evacuable load-lock chamber connected in parallel with the processing apparatuses to the common transfer chamber, which is also evacuable.
- 19. The semiconductor processing system of claim 17, wherein the first and the second support arm slide along substantially circular arcs, and the first and the second support surface occupy a same position when being in a state projected from the transfer base.

20

25

5

20. The semiconductor processing system of claim 17, wherein the first and the second support arm slide along directions converging toward each other when projected from the transfer base, and the first and the second support surface occupy a same position when being in a state projected from the transfer base.

21. The semiconductor processing system of claim 17, wherein the first and the second support arm slide along directions diverging from each other when projected from the transfer base.

5

10

15

- 22. The semiconductor processing system of claim 17, wherein the first and the second support arm are disposed in parallel with each other.
- 23. The semiconductor processing system of claim 17, further comprising a controller for controlling the transfer mechanism to simultaneously revolve the transfer base and slide at least one of the first and the second support arm.
 - 24. The semiconductor processing system of claim 17, wherein the transfer base is linearly movable and

the semiconductor processing system further comprising a controller for controlling the transfer mechanism to simultaneously make a linear motion of the transfer base and slide at least one of the first and the second support arm.